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BY ELECTRONIC MAIL

Mr. Eddy Lin
MC-206, Air Quality Division, TCEQ
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Re: Chapter 115 Stakeholder Group

Dear Eddy:

The Texas Terminal Operators Group appreciates the opportunity to provide informal comments on issues with the degassing rules in 30 TAC Chapter 115. The Group's comments are enclosed.

For further information, please do not hesitate to contact me.

Sincerely

Jason C. Moore

Texas Terminal Operators Group

Comments on Chapter 115 Degassing Rules

I. INTRODUCTION

The Texas Terminal Operators Group ("the Group") appreciates the opportunity to provide informal comments on the revised degassing rules in 30 TAC Chapter 115. Group members own or operate a significant percentage of the for-hire industrial storage tanks in the Houston-Galveston-Brazoria ("HGB") area. The Group is comprised of Houston Fuel Oil Terminal Company, Intercontinental Terminals Company LLC, Kinder Morgan Liquid Terminal LLC, LBC Houston LP, Oiltanking Holding Americas Inc., Stolthaven Houston Inc., and Vopak Logistics North America Inc.

In general, as a result of revisions to certain tank degassing rules in Chapter 115 that became effective January 1, 2009, certain clarifications and/or rule modifications are necessary to ensure the consistent application of the degassing rules and to allow Group members to better ensure compliance with the rules. Toward that end, the Group offers the following specific comments on the revised degassing rules.

II. SPECIFIC COMMENTS

A. Rule Clarifications

At the November 16, 2009 stakeholder meeting, Texas Commission on Environmental Quality ("TCEQ") staff invited comment on certain rule clarifications. The Group's comments are as follows.

1. Definitions of "Degassing" and "Venting"

Section 115.542(a)(6) sets forth the control requirements for venting to the atmosphere when a tank is degassed or cleaned. As the rules are currently written, there is uncertainty as to when the degassing control requirements are triggered. The existing storage tank rules in 30 TAC Chapter 115 (Subchapter B, Division 1) set forth the control requirements for storage tanks up to and including when a floating roof has landed. There is uncertainty as to whether Section 115's degassing rules are triggered once a floating roof has landed and stands idle, but no active degassing or cleaning activities have begun. In such a situation, the tank is neither controlled nor forcibly ventilated and would only emit small amounts of breathing losses, if any, of Volatile Organic Compounds ("VOCs") as a result of standing idle. The rules in Subchapter B appear to apply in such a situation. For example, 30 TAC § 115.112(d) (2)(H) sets forth control requirements that specifically include situations where a floating roof has landed and is supported by leg supports.

Additionally, there is uncertainty regarding the applicability of the 30 TAC Chapter 115, Subchapter F, Division 3 rules when storage tanks are degassed to a control device but are not subsequently opened and ventilated for cleaning or personnel entry. Such degassing operations may be performed for floating roof landings as required by New Source Review ("NSR") permits when tank cleaning is not deemed necessary, or from roof landing events that

are otherwise authorized by degassing a tank that will be refilled without any tank cleaning involved.

The Group therefore suggests that Section 115.542 be revised to state that Chapter 115's degassing requirements apply only to degassing activities performed (a) in preparation of cleaning for a planned product change in service, or (b) in preparation for personnel entry for interior inspection or maintenance. The rule should make clear that it does not apply to vessel degassing events with no subsequent cleaning or tank entry.

Further, the Group suggests that the rules be revised to make clear that the degassing rules do not apply until a tank is physically connected to a control device for the purpose of degassing, or, in the case of facilities with permanent degassing control equipment, until the owner or operator takes action to initiate the cleaning process. Prior to such time, the general control requirements for storage tanks in Section 115, Subchapter B, continue to apply and would sufficiently address the storage of any VOCs until the tank is opened for active ventilation, degassing, or cleaning.

In addition, the Group recommends that the Section 115.542 be revised to reflect that, for purposes of this rule, the term "vented to the atmosphere" includes only active ventilation using devices such as fans and other air-movers designed to (a) clear a tank's internal vapor space of potentially hazardous atmosphere and (b) provide fresh air necessary for safe confined-space entry by personnel. This term should not include uncontrolled floating roof storage tanks that are merely standing idle, as these tanks are adequately addressed by the existing storage tank rules in Chapter 115, Subchapter B.

2. When to Start and Stop Taking 12-Hour VOC Concentration Measurements

(a). No measurements should be required once a tank reaches 17,500 ppm or less, or is below 25 percent of the LEL

Section 115.542(a)(6) requires that "VOC concentrations must be measured once every 12 hours if the storage tank or transport vessel is vented continuously to the atmosphere, and upon restart of the degassing and cleaning operation if venting to the atmosphere has been suspended for more than four hours." This provision also provides that "[w]hile venting to the atmosphere, measurements must continue until five consecutive readings of VOC concentrations collected at 12 hour intervals are measured to be less than 34,000 ppm or less than 50% of the LEL."

Once the controlled portion of degassing is complete, a tank is then typically prepared for interior cleaning and maintenance personnel confined-space entry by actively ventilating the tank's vapor space with fresh air, thereby removing a potentially hazardous atmosphere from the tank before any entry is allowed.

Since the January 2009 effective date of the most recent revisions to the Chapter 115, Subchapter F, Division 3 degassing rules, Group members have been collecting the required 12-hour tank VOC concentration readings for storage tanks that have been degassed. These actual measurements demonstrate that when a storage tank has been successfully degassed to

below 34,000-ppmv (or to below 50-percent LEL) and the tank has no significant residual liquid heel or bottom sludge, that the tank's interior VOC concentration is typically very low within a few hours of beginning active vapor space ventilation, and that it will remain low due to the lack of any significant product heel inside the tank. In such instances, the existing rule requirement to collect any additional VOC concentration measurements results in an unnecessary use of resources, and also increases costs for those companies that hire third-party contractors to perform and document these VOC vapor space readings.

Accordingly, Group members propose that Section §115.542(a)(6) be revised to make clear that no additional VOC concentration measurements are required once (a) a tank has been washed and degassed or has been deemed safe for entry, and (b) the tank is documented to be below 17,500-ppmv VOC or less than 25-percent of the LEL. Providing these specific conditions and VOC levels within the rule will allow Group members to more effectively utilize their resources while also providing the TCEQ with assurance that a degassed storage tank has satisfied the requirement for VOC control below 34,000-ppmv or below 50-percent LEL.

(b). A vapor space turnover requirement is unnecessarily burdensome

At the November 16, 2009 stakeholder meeting, TCEQ staff indicated that one option under consideration is the addition of a vapor space turnover requirement prior to completing degassing. This requirement would be unnecessarily burdensome because it would require operators to potentially run degassing equipment when vapors in the tank are already below the 34,000 ppmv threshold for VOCs.

In addition, such a requirement would result in excess assist fuel being consumed to support the combustion in the control device during periods of low tank vapor space VOC concentrations. Additional combustion by-product emissions (nitrous oxides and carbon monoxide) will also be generated as a result of operating degassing equipment when a tank is below 34,000 ppmv of VOCs, which is undesirable in ozone non-attainment areas such as the HGB area.

B. Demonstrating Control Efficiency

Section 115.541(a)(1)(B) provides that "[t]he vapor control system must maintain a control efficiency of at least 90%." There is uncertainty as to how regulated entities are to demonstrate compliance with this provision. Much of this uncertainty arises from the fact that while the rules specify a minimum 90% control efficiency and several "Approved Test Methods" are listed, there is no specific requirement within these regulations to perform actual stack testing. It is also unclear when and how often regulated entities must test the control efficiency of their vapor control systems used in degassing.

Group members typically do not perform tank degassing themselves. Rather, they hire third party tank degassing contractors that move skids loaded with degassing equipment from facility to facility. It would be highly impractical to require each contractor to perform stack testing each time it brings equipment onsite to degas a tank. Requiring repeated stack testing would also unnecessarily divert manpower resources, result in significant operational delays, and cause additional expense.

Moreover, a wide variety of vapor control devices are utilized for controlled tank and transportation vessel degassing operations. Fixed and portable flares, fixed and portable thermal oxidizers, carbon adsorption units, portable internal combustion engines, and portable vapor refrigeration/condensation units are used to perform controlled degassing operations at Group member facilities.

The Group therefore suggests that Section 115.541 be revised to expressly provide that regulated entities may comply with this provision by providing a one-time stack test report for each control device used during degassing operations. This would allow Group members and contractors to effectively and efficiently demonstrate compliance with the rule by showing the required efficiency level for degassing equipment without the cost and burden of repetitive stack testing each time degassing is performed. Similarly, the Group suggests that the rules make clear that control devices that have already demonstrated compliance with the 90% control efficiency under Section 115.545 need not be retested under the forthcoming rules.

The Group also suggests adding a requirement that TCEQ approve the stack tests required under this section to better enable tank owners and operators to ensure compliance with the rules. The Group suggests that the source tests required under these rules should be required to be submitted to and approved by TCEQ within 60 days.

The Group further suggests that the rules be revised to clarify how compliance with the required control efficiency should be demonstrated for (a) non-enclosed flares, which can not be sampled after control; (b) for vapor refrigeration/condensation units, which condense vapors back into liquid form but do not destroy any VOC in the process; and (c) for "closed loop" tank degassing configuration, where a return low VOC stream is injected back into the tank for additional treatment.

C. Approved Test Methods

Section 115.545 enumerates several test methods for demonstrating the emissions specifications and control requirements in sections 115.541 and 115.542. There is uncertainty regarding the various test requirements and methodologies necessary to demonstrate compliance with the emission specifications and minimum acceptable VOC destruction efficiencies. Due to significant differences in the types of control devices used for degassing operations, the current list of approved test methods cited in the current regulations is incomplete. This incomplete list of test methods, and the lack of flexibility in adopting alternative methods, results in additional complexity and increased cost in performing testing. Furthermore, in the case of thermal oxidizer testing, using the listed test methods could actually create safety concerns if testers are required by the TCEQ to measure stack velocity directly.

Specifically, the Group requests that Test Method 19 (40 CFR 60, Appendix A) be adopted as an approved method and is listed in section 115.545 so that it may be used in compliance testing performed in support of sections 115.541 and 115.542. Test Method 19 allows testing companies to calculate exhaust flow rates based on the measured fuel flow and oxygen concentrations, and has been used extensively in past stack emissions testing. Further, 30 TAC § 117.8000 (Stack Testing Requirements), allows the use of Test Method 19 for determining exhaust gas flow rates for certain testing required under the agency's Chapter 117 rules [see Section 117.8000(c)(5)]. In addition, the TCEQ Air Permits Division has proposed

that Test Method 19 be applied for exhaust flow rate determinations from internal combustion engines when they are used as a control device for planned maintenance activities under the model draft MSS permit.

The Group also requests that section 115.545 be modified to allow the use of other approved test methods that are not specifically cited within the degassing regulation, provided these test methods are approved by the executive director. Such flexibility is necessary given the wide variety of control equipment used for degassing operations.

Until these rules can be modified, the Group requests that TCEQ issue interpretive guidance clarifying that regulated entities may use other test methods not specifically enumerated in Section 115.545 in circumstances where such test methods are more appropriate. This would provide regulated entities with flexibility in performing the most appropriate testing to comply with Section 115's emissions specifications and control requirements.

D. Notification Requirements

TCEQ staff have invited comment on whether the degassing rules should be revised to include a requirement that regulated entities provide advance notice of planned degassing or cleaning activities in the HGB area. The Group opposes such a requirement.

A notification requirement is unnecessary given that any unauthorized tank degassing event that exceeds a reportable quantity must be reported to TCEQ in advance pursuant to the existing MSS rules in 30 TAC 101, Subchapter F. Section 101.211(a) provides:

> The owner or operator of a regulated entity conducting a scheduled maintenance, startup or shutdown activity shall notify the commission office for the region in which the regulated entity is located and all appropriate local air pollution control agencies with jurisdiction at least ten days prior to any scheduled maintenance, startup or shutdown activity that is expected to cause an unauthorized emission that equals or exceeds the reportable quantity (RQ) . . . by emissions point in any 24-hour period . . . . If notice cannot be given ten days prior to a scheduled maintenance, startup or shutdown activity, notification must be given as soon as practicable prior to the scheduled activity.

The existing rules therefore already provide for advance notice to TCEQ of any significant unauthorized tank degassing activity.

A notification requirement is also burdensome given the number of degassing activities owners and operators typically perform in a given year. Group members often conduct more than 60 degassing or cleaning events per year. Requiring regulated entities to provide advance notice of each planned degassing or cleaning activity is unnecessary and highly burdensome. As such, a notification requirement would add little value for the burden it would place on regulated entities.

E. Registration Requirement

TCEQ staff have also invited comment on whether to revise the degassing rules to require registration of portable control equipment used in the HGB area. As noted above, Group members—as well as other facilities in the area—typically hire third party contractors to perform degassing or cleaning activities. The Group supports a simple and efficient registration requirement for these contractors. The Group further supports the creation of a list of degassing contractors specifically certified by the TCEQ.

However, because degassing activities are typically performed by third party contractors, the Group opposes any requirement that facility owners or operators be required to register with the TCEQ or be liable for any failure of a third party contractor to comply with any registration requirement.

F. Compliance Deadline

Several of the rule revisions under consideration would require modifications to Group members' existing equipment, particularly permanent control devices. As a result, if any rule revisions are approved which would require the modification of existing equipment, the Group requests that the TCEQ provide a reasonable deadline to implement the regulatory changes.

The Group therefore suggests the following timeframe for compliance activities involving modifications to existing equipment: (a) ten years for actions that require a tank to be placed out of service to make the required upgrades, and (b) one year for actions that involve non-tank upgrades.